

What is claimed is:

1. A computer mouse with magnetic orientation, comprising:
  - 5 a body in which is located a mechanism for sensing the x and y movement of the body and converting this movement to x and y movement data;  
the body containing a compassing device for determining the magnetic orientation of the body and converting the magnetic orientation to magnetic orientation data;
  - 10 a processor for receiving and processing the x and y movement data and the magnetic orientation data and for sending the processed data to a transmitter located in the body;  
the transmitter being a wireless transmitter for sending signals based on the x and y data and the magnetic orientation data in real time.
- 15 2. The mouse of claim 1, wherein:  
the compassing device is a solid state sensor.
3. The mouse of claim 2, wherein:
  - 20 the sensor comprises two linear magnetic sensors mounted at 90 degrees to each other.
4. The mouse of claim 1, wherein:  
the mouse includes a user command input switch which is orientation free.
- 25 5. The mouse of claim 4, wherein:  
the mouse includes a second user command input switch which is orientation free.

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6. The mouse of claim 4, wherein:

the mouse further comprises a flexible exterior cover under which is located a first user command input switch which is activated when the shell is squeezed.

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7. The mouse of claim 5, wherein:

the mouse further comprises a flexible exterior cover under which is located a first user command input switch which is activated when the cover is squeezed and a second user command input switch which is activated when the cover is depressed.

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8. The mouse of claim 6, wherein:

the first user command input switch comprises two buttons located at generally ninety degrees to one another.

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9. The mouse of claim 6, wherein:

the first user command input switch is assuredly activated when a lower rim of the cover is squeezed at any diametrically opposite positions.

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10 The mouse of claim 1, wherein:

the body is round.

11. The mouse of claim 1, wherein:

the body is round and has mounted on it a base orientation switch which communicates with the processor.

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12. The mouse of claim 10, further comprising:

a ball bearings assembly interposed between the body and a retaining ring, the assembly providing the mouse with a lower friction coefficient in a rotational mode than in a linear mode.

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13. The mouse of claim 1, further comprising:  
a compass disabling switch.

14. The mouse of claim 1, further comprising:  
5 a first circuit board on which is mounted an optical sensor for generating x and y data.

15. The mouse of claim 1, further comprising:  
a circuit board carrying a vertically oriented user command input switch.

10 16. The mouse of claim 14, further comprising:  
a second circuit board, located above the first circuit board, the second circuit board carrying batteries for operating the mouse.

15 17. The mouse of claim 15, further comprising:  
a semi-rigid shell interposed between a flexible outer cover the circuit board;  
the shell transmitting a downward force from the cover to the vertically oriented switch.

20 18. The mouse of claim 6, wherein:  
the first user command input switch comprises three buttons located at generally one hundred and eighty degrees to one another.

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